AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1-24. (Canceled).

25. (Previously Presented) An insulating substrate board for a semiconductor comprising a ceramic substrate board and a metal alloy layer consisting mainly of aluminum bonded by direct bonding on at least one surface portion of the ceramic substrate board, wherein the Vickers hardness of the metal alloy layer is not less than 25 and not more than 40.

26. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes silicone of not less than 0.2% by weight and not more than 2% by weight.

27. (Previously Presented) The insulating substrate board according to claim 26, wherein the metal alloy layer includes Mn of not more than 2% by weight.

28. (Previously Presented) The insulating substrate board according to claim 26, wherein the metal alloy layer includes Mg of not more than 1% by weight.

29. (Previously Presented) The insulating surface board according to claim 26, wherein the metal alloy layer includes Cu of not less than 0.2% by weigh and not more than 3% by weight.

30. (Previously Presented) The insulating substrate board according to claim 26, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

31. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes Mn of not more than 2% by weight.

32. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes Mg of not more than 1% by weight.

33. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes Cu of not les that 0.2% by weight and not more than 3% by weight.

34. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes Zn of not less than 0.2% by weight and not more than 3% by weight.

35. (Previously Presented) The insulating substrate board according to claim 25, wherein the metal alloy layer includes Ni of not less than 0.2% by weight and not more than 3% by weight.

36. (Previously Presented) The insulating substrate board according to claim 25, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

37. (Previously Presented) An insulating substrate board for a semiconductor comprising a ceramic substrate board and a metal alloy layer consisting mainly of aluminum bonded through a brazing material layer on at least one surface portion of the ceramic substrate board, wherein the Vickers hardness of the metal alloy layer is not less than 25 and not more than 40.

38. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes silicone of not less than 0.2% by weight and not more than 2% by weight.

39. (Previously Presented) The insulating substrate board according to claim 38, wherein the metal alloy layer includes Mn of not more than 2% by weight.

40. (Previously Presented) The insulating substrate board according to claim 38, wherein the metal alloy layer includes Mg of not more than 1% by weight.

41. (Previously Presented) The insulating surface board according to claim 38, wherein the metal alloy layer includes Cu of not less than 0.2% by weight and not more than 3% by weight.

42. (Previously Presented) The insulating substrate board according to claim 38, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

43. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes Mn of not more than 2% by weight.

44. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes Mg of not more than 1% by weight.

45. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes Cu of not les that 0.2% by weight and not more than 3% by weight.

46. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes Zn of not less than 0.2% by weight and not more than 3% by weight.

47. (Previously Presented) The insulating substrate board according to claim 37, wherein the metal alloy layer includes Ni of not less than 0.2% by weight and not more than 3% by weight.

48. (Previously Presented) The insulating substrate board according to claim 37, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

49. (Previously Presented) A power module comprising a ceramic substrate board, metal alloy layers consisting mainly of aluminum bonded by direct bonding on both surfaces of the ceramic substrate board, a metal base plate bonded to one of the metal alloy layers, and a semiconductor tip formed on the other of the metal alloy layers, wherein the Vickers hardness of at least said one alloy layer is not less than 25 and not more than 40.

50. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes silicone of not less than 0.2% by weight and not more than 1% by weight.

51. (Previously Presented) The power module according to claim 50, wherein the metal alloy layer includes Mn of not more than 2% by weight.

52. (Previously Presented) The power module according to claim 50, wherein the metal alloy layer includes Mg of not more than 1% by weight.

53. (Previously Presented) The power module according to claim 50, wherein the metal alloy layer includes Cu of not less than 0.2% by weight and not more than 3% by weight.

54. (Previously Presented) The power module according to claim 50, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

55. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes Mn of not more than 2% by weight.

56. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes Mg of not more than 1% by weight.

57. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes Cu of not less than 0.2% by weight and not more than 3% by weight.

58. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes Zn of not less than 0.2% by weight and not more than 3% by weight.

59. (Previously Presented) The power module according to claim 49, wherein the metal alloy layer includes Ni of not less than 0.2% by weight and not more than 3% by weight.

60. (Previously Presented) The power module according to claim 49, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

61. (Previously Presented) A power module comprising a ceramic substrate board, metal alloy layers consisting mainly of aluminum bonded through a brazing material on both surfaces of the ceramic substrate board, a metal base plate bonded to one of the metal alloy layers, and a semiconductor tip formed on one of the metal alloy layers, wherein the Vickers hardness of at least said one metal alloy layer is not less than 25 and not more than 40.

62. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes silicone of not less than 0.2% by weight and not more than 2% by weight.

63. (Previously Presented) The power module according to claim 62, wherein the metal alloy layer includes Mn of not more than 2% by weight.

64. (Previously Presented) The power module according to claim 62, wherein the metal alloy layer includes Mg of not more than 1% by weight.

65. (Previously Presented) The power module according to claim 62, wherein the metal alloy layer includes Cu of not less than 0.2% by weight and not more than 3% by weight.

66. (Previously Presented) the power module according to claim 62, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.

67. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes Mn of not more than 2% by weight.

68. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes Mg of not more than 1% by weight.

69. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes Cu of not less than 0.2% by weight and not more than 3% by weight.

70. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes Zn of not less than 0.2% by weight and not more than 3% by weight.

71. (Previously Presented) The power module according to claim 61, wherein the metal alloy layer includes Ni of not less than 0.2% by weight and not more than 3% by weight.

72. (Previously Presented) The power module according to claim 61, wherein the ceramic substrate board is made of a material selected from a group consisting of alumina, aluminum nitride, and silicone nitride.